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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,680	11/20/2003	Lewis R. Norman	2003-IP-009800U1	8569

7590 06/01/2006

Robert A. Kent
Halliburton Energy Services
2600 S. 2nd Street
Duncan, OK 73536

EXAMINER

WHITE, EVERETT NMN

ART UNIT	PAPER NUMBER
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1623

DATE MAILED: 06/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/717,680	Applicant(s) NORMAN ET AL.	
	Examiner Everett White	Art Unit 1623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 32-34 is/are pending in the application.
- 4a) Of the above claim(s) 8-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1- 7, 32 and 34 is/are rejected.
- 7) ☒ Claim(s) 33 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed March 8, 2006 has been received, entered and carefully considered. The amendment affects the instant application accordingly:

- (A) Claims 8-31 have been canceled;
- (B) New Claims 33 and 34 have been added;
- (C) Claims 2-4 have been amended;
- (D) Comments regarding Office Action have been provided drawn to:
 - (I) 102(b) rejection, which has been maintained for the reasons of record;
 - (II) 103(a) rejection, which has been maintained for the reasons of record.

2. Claims 1-7 and 32-34 are pending in the case.

3. The text of those sections of Title 35, U. S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-4, 6, 7 and 32 stand rejected under 35 U.S.C. 102(b) as being anticipated by Phillips et al (US Patent No. 5,002,125) for the reasons disclosed on pages 2 and 3 of the Office Action mailed December 8, 2005.

6. Applicant's arguments filed March 8, 2006 have been fully considered but they are not persuasive. Applicants argue against the rejection on the ground that the Phillips et al patent does not disclose any method or process that includes derivatizing a polysaccharide. Applicants further argue that derivatizing and crosslinking are completely different chemical reactions that result in completely different molecular structures. These arguments are not persuasive since the Phillips et al patent uses identical components to form crosslinked polysaccharides, which include metals that are selected from the same period and groups of the periodic table such as iron, identical

polysaccharides such as hydroxypropyl guar, and acetylacetonate as part of the coordinating complex, which is disclosed in instant Claim 4 as a bidentate ligand. Although, the instantly claimed method and the process disclosed in the Phillips et al patent may described the various components of the reaction at different points of time, identical components described in each of the documents are present in the respective processes to produce an identical crosslinked polysaccharide. Accordingly, the rejection of Claims 1-4, 6, 7 and 32 under U.S.C. 102(b) is maintained for the reasons of record.

7. Claims 32 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Phillips et al (US Patent No. 5,002,125).

Applicants claimed a metal ion crosslinked polysaccharide in the form of a product-by-process claim wherein the bidentate ligand used in the process to prepare the metal ion crosslinked polysaccharide is 2,2'-bipyridine. The Office considers product-by-process claims as product claims. Applicants are reminded that process limitations cannot impart patentability to a product that is not patentably distinguished over the prior art. *In re Thorpe et al.* (CAFC 1985), supra; *In re Dike* (CCPA 1968) 394 F2d 584, 157 USPQ 581; *Tri-Wall Containers, Inc. v. United States et al.* (Ct Cls 1969) 408 F2d 748, 161 USPQ 116; *In re Brown et al.* (CCPA 1972) 450 F2d 531, 173 USPQ 685; *Ex parte Edwards et al.* (BPAI 1986) 231 USPQ 981. Accordingly, the process limitations disclosed in Claims 32 and 34 have not been considered.

The Phillips et al patent discloses titanium acetylacetonate as a crosslinking agent for hydroxypropyl guar (HPG) or carboxymethyl hydroxyethylcellulose (CMHEC) (see column 10, lines 28-30), which anticipate the instantly claimed metal ion crosslinked polysaccharide of instant Claims 32 and 34.

Claim Rejections - 35 USC § 103

8. Claim 5 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips et al (US Patent No. 5,002,125) for the reasons disclosed on pages 4-6 of the Office Action mailed December 8, 2005.

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9. Applicant's arguments filed March 8, 2006 have been fully considered but they are not persuasive. Applicant's argument against instant Claim 5 is based on the argument against Claim 1 since Claim 5 is dependent from Claim 1. Accordingly, the rejection of Claim 5 is maintained for the same reasons presented against Claim 1 in the above rejection of the claims under 35 USC 102(b).

Allowable Subject Matter

10. Claim 33 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Reasons for Indicating Allowable Subject Matter

11. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record does not disclose a method of crosslinking a polysaccharide comprising crosslinking a derivatized polysaccharide having bidentate ligands with a metal ion to form a metal ligand coordination complex, wherein the bidentate ligand comprise 2,2'-bipyridine.

Summary

12. Claims 1-7, 32 and 34 are rejected; Claim 33 is objected to.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Examiner's Telephone Number, Fax Number, and Other Information


14. For 24 hour access to patent application information 7 days per week, or for filing applications, please visit our website at www.uspto.gov and click on the button "Patent Electronic Business Center" for more information.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Everett White whose telephone number is (571) 272-0660. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shaojia A. Jiang, can be reached on (571) 272-0627. The fax phone number for this Group is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-1600.


E. White


Shaojia A. Jiang
Supervisory Primary Examiner
Technology Center 1600